REMARKS

Claims 1-15 are pending in this application. By this Amendment, 1-3, 5, 6 and 11 are amended. Support for the amendments can be found, at least, in Figs. 4 and 7, and paragraphs [0042]-[0044], [0049] [0050] and [0069]. In particular, Applicant draws the Examiner's attention to the iterative processes shown in Figs. 4 and 7 as evidence of the "dynamic" calculation process. No new matter is added.

The courtesies extended to Applicant's representative by Examiner Lee at the interview held November 4, 2009, are appreciated. The reasons presented at the interview as warranting favorable action are incorporated into the remarks below, which constitute Applicant's record of the interview.

As a preliminary matter, the Office Action notes that the functional recitation of claims 1-5 and 11-15 were not given patentable weight. As discussed during the personal interview, the claims have been amended to recite, for example, "a cathode-side gas pressure detecting unit configured to detect a gas pressure within at least one of the oxidizing gas supply line and the cathode." Thus, Applicant respectfully asks that all claim terms and features be given full patentable weight.

Claims 1, 2, 6, 7, 11 and 12 are rejected under 35 U.S.C. §103(a) over U.S. Patent No. 6,632,552 to Yamanashi in view of U.S. Patent Publication No. 2003/0157383 to Takahashi. This rejection is respectfully traversed.

Claim 1 has been amended in accordance with the proposals and suggestions put forth during the personal interview. Claim 1, as amended, recites a control apparatus for a fuel cell including...a hydrogen supplying unit configured to supply hydrogen to an anode via a hydrogen supply line of the fuel cell, the anode having a buildup of impurities over time causing a presence of residual gas." Claim 1 further recites "a target hydrogen partial pressure determining unit configured to dynamically calculate a target hydrogen partial

pressure regarding a hydrogen pressure among a gas mixture in the anode." Claims 6 and 11 have been amended to recite similar features. The applied references, either alone or in combination, fail to disclose these features.

As explained during the personal interview, Yamanashi discloses a system for removing water from a fuel cell stack, without impairing driving performance. Yamanashi does not disclose any method, or indeed any desire, to calculate a target hydrogen partial pressure necessary to supply a desired amount of power, even as impurities build up in the anode and begin to impede power generating performance. Takahashi also fails to disclose or suggest the necessity or means for calculating such a target hydrogen partial pressure for maintaining power generation as impurities build.

Thus, the rejection of claims 1, 6 and 11, and claims 2, 7 and 12 depending therefrom, is respectfully requested.

Claims 3, 4, 8, 9, 13 and 14 are rejected under 35 U.S.C. §103(a) over Yamanashi and Takahashi and further in view of U.S. Patent Publication No. 2004/0265658 to de Vaal. Claims 5, 10 and 15 are rejected under 35 U.S.C. §103(a) over Yamanashi and Takahashi and further in view of U.S. Patent No. 7,371,477 to Yamamoto. These rejections are respectfully traversed.

Claims 3-5, 8-10 and 13-15 depend from claims 1, 6 and 11. As discussed above, Yamanashi and Takahashi fail to disclose or suggest the features of claims 1, 6 and 11. Yamamoto and de Vaal fail to supply the missing subject matter. Thus, claims 3-5, 8-10 and 13-15 are in condition for allowance based on their dependence.

Furthermore, the rejection of claim 3, 8 and 13 lacks merit. The Office Action concedes that the applied references of Yamanashi and Takahashi do not disclose, for example, the recited temperature sensor of claim 3. Rather, the Office Action asserts that de Vaal discloses a temperature sensor and that it would have been obvious to include this

temperature sensor in Yamanashi for the purpose of operating the fuel cell efficiently based on external temperature.

But de Vaal fails to disclose a correcting unit configured to correct a target hydrogen partial pressure based upon the temperature of the fuel cell. Rather, de Vaal only discloses a controller that ceases delivery of fuel to the fuel cell stack if the temperature reading exceeds a certain threshold. De Vaal does not disclose or suggest any need to modify a target hydrogen partial pressure, or the flow rates of hydrogen into the fuel cell below this threshold temperature, to correct for the difference in pressure of the hydrogen based on the temperature. For all these reasons, withdrawal of the rejections of claims 3-5, 8-10 and 13-15 is respectfully requested.

In view of the foregoing, it is respectfully submitted that this application is in condition for allowance. Favorable reconsideration and prompt allowance of the claims are earnestly solicited.

Should the Examiner believe that anything further would be desirable in order to place this application in even better condition for allowance, the Examiner is invited to contact the undersigned at the telephone number set forth below.

Respectfully submitted,

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